

FORM PTO-1449 (REV. 7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO.: 58020.000027	SERIAL NO.: 09/605,162	
LIST OF MATERIALS CITED BY APPLICANT (Use several sheets if necessary)		INVENTOR'S NAME: Robert K. Wade		EXAMINER: Not Yet Assigned	RECEIVED JUL 23 2001 Technology Center 2600	
		FILING DATE: June 27, 2000		GROUP: 2873 Not Yet Assigned		
U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
A-1	5,457,573	10/10/95	Iida et al.	359	569	
A-2	4,857,726	08/15/89	Kinney et al.	250	226	
A-3	5,170,451	12/08/92	Ohshima	385	43	RECEIVED
A-4	5,555,334	09/10/96	Ohnishi et al.	385	93	DEC 04 2000
A-5	4,708,425	11/24/87	Gouali et al.	350	96.16	
A-6	5,742,416	04/21/98	Mizrahi	359	134	Technology Center 2600
A-7	4,274,706	06/23/81	Tangonan	350	96.19	
A-8	5,768,450	06/16/98	Bhagavatula	385	24	
A-9	4,923,271	05/08/90	Henry et al.	350	96.19	
A-10	5,583,683	12/10/96	Scobey	359	127	
A-11	5,355,237	10/11/94	Lang et al.	359	130	
A-12	4,748,614	05/31/88	Dammann et al.	370	3	
A-13	4,703,472	10/27/87	Blumentritt et al.	370	3	
A-14	5,657,406	08/12/97	Ball	385	24	
A-15	5,745,612	04/28/98	Wang et al.	385	24	
A-16	4,643,519	02/17/87	Bussard et al.	350	96.19	
A-17	4,634,215	01/06/87	Reule	350	96.16	
A-18	4,773,063	09/20/88	Hunsperger et al.	370	3	
A-19	4,744,618	05/17/88	Mahlein	350	96.19	
A-20	4,752,108	06/21/88	Vollmer	350	96.12	
A-21	5,228,103	07/13/93	Chen et al.	385	14	
A-22	4,279,464	07/21/81	Colombini	350	96.19	
A-23	5,500,910	03/19/96	Boudreau et al.	385	24	
A-24	5,450,510	09/12/95	Boord et al.	385	37	
A-25	4,746,186	05/24/88	Nicia	350	96.13	
A-26	4,760,569	07/26/88	Mahlein	350	3	
A-27	4,652,080	03/24/87	Carter et al.	350	96.19	

EXAMINER	LOHA BEN	DATE CONSIDERED	8/19/04
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

Copy	A-28	4,819,224	04/04/89	Laude	370	3	
	A-29	4,786,133	11/22/88	Gidon et al.	350	96.19	
	A-30	5,513,289	04/30/96	Hosokawa et al.	385	33	
	A-31	4,740,951	04/26/88	Lizet et al.	370	3	
	A-32	5,748,815	05/05/98	Hamel et al.	385	37	RECEIVED DEC 04 2000
	A-33	5,777,763	07/07/98	Tomlinson, III	359	130	Technology Center 2600
	A-34	4,626,069	12/02/86	Dammann et al.	350	162.2	
	A-35	5,745,270	04/28/98	Koch	359	124	
	A-36	5,442,471	08/15/95	Skrabko	359	110	RECEIVED JUL 23 2001
	A-37	5,748,350	05/05/98	Pan et al.	359	130	
	A-38	5,606,434	02/25/97	Feldman et al.	359	3	
	A-39	5,363,220	11/08/94	Kuwayarna et al.	359	3	Technology Center 2600
	A-40	4,343,532	08/10/82	Palmer	350	96.19	
	A-41	5,440,416	08/08/95	Cohen et al.	359	127	
	A-42	4,111,524	09/05/78	Tomlinson, III	350	96.19	
	A-43	4,153,330	05/08/79	Tomlinson, III	350	96.17	
	A-44	4,198,117	04/15/80	Kobayashi	350	96.19	
	A-45	4,299,488	11/10/81	Tomlinson, III	356	328	
	A-46	4,387,955	06/14/83	Ludman et al.	350	96.19	
	A-47	4,479,697	10/30/84	Kapany et al.	350	96.18	
	A-48	4,522,462	06/11/85	Large et al.	350	96.19	
	A-49	4,583,820	04/22/86	Flamand et al.	350	96.19	
	A-50	4,622,662	11/11/86	Laude et al.	370	003	
	A-51	4,671,607	01/09/87	Laude	350	96.15	
	A-52	4,741,588	05/03/88	Nicia et al.	350	96.19	
	A-53	4,749,247	06/07/88	Large	350	96.16	
	A-54	4,763,969	08/16/88	Khoe et al.	350	96.19	
	A-55	4,834,485	05/30/89	Lee	350	96.19	
	A-56	4,836,634	06/06/89	Laude	350	96.19	
	A-57	4,926,412	05/15/90	Jansson et al.	370	3	
	A-58	4,930,855	06/05/90	Clark et al.	350	96.19	
	A-59	4,934,784	06/19/90	Kapany et al.	350	96.18	
	A-60	5,026,131	06/25/91	Jansson et al.	350	3.7	
	A-61	5,107,359	04/21/92	Ohuchida	359	124	
	A-62	5,278,687	01/11/94	Jansson et al.	359	125	
	A-63	5,526,155	06/11/96	Knox et al.	359	130	
	A-64	5,745,271	04/28/98	Ford et al.	359	130	
Copy	A-65	5,748,815	05/05/98	Hamel et al.	385	37	

EXAMINER	LOHA BEN	DATE CONSIDERED	8/19/04
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

4	A-66	4,726,645	02/23/88	Yamashita et al.	350	96.18	
5	A-67	5,541,774	07/30/96	Blankenbecler	359	653	
6	A-68	5,703,722	12/30/97	Blankenbecler	359	653	
7	A-69	5,880,834	03/09/99	Chrisp	356	328	



RECEIVED
 JUL 23 2001
 Technology Center 2600
RECEIVED
 DEC 04 2000
 Technology Center 2600

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Doc #: 174843; v. 1

RECEIVED

DEC 04 2000

Technology Center 2000

OTHER MATERIALS (Including Author, Title, Date, Pertinent Pages, Etc.)		
	C-1	G. R. Harrison, Ph.D., Sc.D. et al., Practical Spectroscopy, Chapter 4 - Diffraction-Grating Spectrographs, Prentice-Hall (1948)
	C-2	W. J. Tomlinson, Wavelength multiplexing in multimode optical fibers, Applied Optics, Vol. 16, No. 8 (August 1977)
	C-3	W. J. Tomlinson et al., Optical multiplexer for multimode fiber transmission systems, Appl. Phys. Lett., Vol. 31, No. 3 (August 1977)
JC 78 SP 2/2/2001		
	C-4	W. J. Tomlinson et al., Optical wavelength-division-multiplexer for the 1-1.4 μ m spectral region, Electronics Letters, Vol. 14, No. 11 (May 25, 1973)
	C-5	T. Miki et al., Viabilities of the wavelength-division-multiplexing transmission system over an optical fiber cable, IEEE Transactions on Communications, Vol. Com-26, No. 7 (July 1978)
	C-6	K. Aoyama et al., Optical demultiplexer for a wavelength division multiplexing system, Applied Optics, Vol. 18, No. 8 (April 15, 1979)
	C-7	K. Aoyama et al., Low-loss optical demultiplexer for WDM system in the 0.8 μ m wavelength region, Applied Optics, Vol. 18, No. 16 (August 15, 1979)
	C-8	R. Watanabe et al., Optical Demultiplexer Using Concave Grating in 0.7-0.9 μ m Wavelength Region, Electronics Letters, Vol. 16, No. 3 (January 31, 1980)
	C-9	K. Kobayashi et al., Microoptic Grating Multiplexers and Optical Isolators for Fibers-Optic Communications, Journal of Quantum Electronics, Vol. QE-16, No. 1 (January 1980)
	C-10	Y. Fujii et al., Optical Demultiplexer Using a Silison Echelette Grating, IEEE Journal of Quantum Electronics, Vol. QE-16, No. 2 (February 1980)
	C-11	W. J. Tomlinson, Applications of GRIN-rod lenses in optical fiber communication systems, Applied Optics, Vol. 19, No. 7 (April 1, 1980)
	C-12	A. Nicia, Wavelength Multiplexing and Demultiplexing Systems for Singlemode and Multimode Fibers, Conference Proceedings, European Conference on Optical Communication (September 8-11, 1981)
	C-13	B.D. Metcalf et al., High-capacity wavelength demultiplexing with a large-diameter GRIN rod lens, Applied Optics, Vol. 21, No. 5 (March 1, 1982)
	C-14	J. Lipson et al., Low-Loss Wavelength Division Multiplexing (WDM) Devices for Single-Mode Systems, Journal of Lightwave Technology, Vol. LT-1, No. 2 (June 1983)
	C-15	G. Winzer, Wavelength Multiplexing Components - A Review of Single-Mode Devices and their Applications, Journal of Lightwave Technology, Vol. LT-2, No. 4 (August 1984)
	C-16	H. Ishio et al., Review and Status of Wavelength-Division-Multiplexing Technology and Its Application, Journal of Lightwave Technology, Vol. LT-2, No. 4 (August 1984)
	C-17	Y. Fujii et al., Optical Demultiplexer Utilizing an Ebert Mounting Silicon Grating, Journal of Lightwave Technology, Vol. LT-2, No. 5 (October 1984)
	C-18	J. Lipson et al., A Four-Channel Lightwave Subsystem Using Wavelength Division Multiplexing, IEEE Journal of Lightwave Technology, Vol. LT-3, No. 1 (February 1985)
	C-19	B. Hillerich et al., Wide Passband Grating Multiplexer for Multimode Fibers, Journal of Lightwave Technology, Vol. LT-3, No. 3 (June 1985)
	C-20	J. Lipson et al., A Six-Channel Wavelength Multiplexer and Demultiplexer for Single Mode Systems, Journal of Lightwave Technology, Vol. LT-3, No. 5 (October 1985)
	C-21	I. Nishi et al., Broad Passband Multi/Demultiplexer for Multimode Fibers Using a Diffraction Grating and Retroreflectors, Journal of Lightwave Technology, Vol. LT-5, No. 12 (December 1987)
	C-22	B. Moslehi et al., Fiber-optic wavelength-division multiplexing and demultiplexing using volume holographic gratings, Optics Letters, Vol. 14, No. 19 (October 1, 1989)
	C-23	Y. Huang et al., Wavelength-division-multiplexing and -demultiplexing by using a substrate-mode grating pair, Optics Letters, Vol. 17, No. 22 (November 15, 1992)
	C-24	M. Wu et al., Design Considerations for Rowland Circle Grating Used in Photonic Integrated Devices for WDM Applications, Journal of Lightwave Technology, Vol. 12, No. 11 (November 1994)
	C-25	A. Stavdas et al., Design of a holographic concave grating used as a multiplexer/demultiplexer in dense wavelength-routed optical networks with subnanometer channel spacing, Journal of Modern Optics, Vol. 42, No. 9, pp. 1863-1874 (September 1995)
	C-26	C. Zhou et al., Four Channel Multimode Wavelength Division Demultiplexer (WDM) System Based on Surface-normal Volume Holographic Gratings and Substrate-guided Waves, SPIE, Vol. 3288
	C-27	A. Stavdas et al., Free-Space Aberration-Corrected Diffraction Grating Demultiplexer for Application in Densely-Spaced, Subnanometer Wavelength Routed Optical Networks, IEEE Electronic Letters, Vol. 31, No. 16, pp. 1368-1370 (August 1995)
	C-28	D. Wisely, High performance 32 channel HDWDM multiplexer with 1nm channels spacing and 0.7nm bandwidth, SPIE, Vol.

EXAMINER

LOHA BEN

DATE CONSIDERED

8/19/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Doc #: 174843; V. 1

RECEIVED

JUL 23 2001

Technology Center 2000

O I P D JC7e SEP 27 2000

		1578, Fiber Networks, Telephony and CATV (1991)
	C-29	A. Cohen et al., Active management of 100-GHz-spaced WDM channels, Optical Fiber Communication Conference and the International Conference on Integrated Optics and Optical Fiber Communication, Technical Digest, Conference Edition (February 24, 1999)
	C-30	B. Keyworth et al., Low Loss, Temperature Stable Diffraction Grating Wavelength (DE) Multiplexer, National Fiber Optic Engineers Conference, Technical Proceedings, Vol. I (September 13-17, 1998)
	C-31	M. Seki et al., 20-Channel Micro-Optic Grating Demultiplexer for 1.1-1.6um Band Using a Small Focusing Parameter Graded - Index Rod Lens, Electronics Letters, Vol. 18, No. 6 (March 18, 1982)
	C-32	A. Koonen, A Compact Wavelength Demultiplexer Using Both Interference Filters and a Diffraction Grating, European Conference of Optical Communication, Conference Proceedings (September 8-11, 1981)
	C-33	J. Conradi et al., Laser Based WDM Multichannel Video Transmission System, Electronic Letters, Vol. 17, No. 2 (January 22, 1981)
	C-34	J. Laude et al., Wavelength division multiplexing/demultiplexing (WDM) using diffraction gratings, SPIE, Vol. 503, Application, Theory, and Fabrication of Periodic Structures (1984)
	C-35	A. Livanos et al., Chirped-grating demultiplexers in dielectric waveguides, Applied Physics Letters, Vol. 30, No. 10 (May 1977)
	C-36	H. Obara et al., Star Coupler Based WDM Switch Employing Tunable Devices With Reduced Tunability Range, Electronic Letters, Vol. 28, No. 13 (June 1992)
	C-37	A. Willner et al., 2-D WDM Optical Interconnections Using Multiple-Wavelength VCSEL's for Simultaneous and Reconfigurable Communication Among Many Planes, IEEE Photonics Technology Letters, Vol. 5, No. 7 (July 1993)
	C-38	M. Wang et al., Five Channel Polymer Waveguide Wavelength Division Demultiplexer for the Near Infrared, IEEE Photonics Technology Letters, Vol. 3, No. 1 (January 1991)
	C-39	M. Li et al., Two-channel surface-normal wavelength demultiplexer using substrate guided waves in conjunction with multiplexed waveguide holograms, Appl. Phys. Lett., Vol. 66, No. 3 (January 1995)
	C-40	J. Laude et al., Stimax, A Grating Multiplexer for Monomode or Multimode Fibers, Ninth European Conference on Optical Communication-ECOC83, Geneva, Switzerland (October 23-26, 1983)
	C-41	R. Watanabe et al., Optical Grating Multiplexer in the 1.1-1.5mm Wavelength Region, Electronics Letters, Vol. 16, No. 3 (January 31, 1980)
	C-42	G.D. Khoe, New Integrated Subscriber Star Network Combining Maximum Versatility With Minimum Costs of Installation and Maintenance, European Conference on Optical Communication, Conference Proceedings, Copenhagen, Bella Center (September 8-11, 1981)
	C-43	T. Lingelsheim et al., Fabrication of micro-optical wavelength division multiplexer (WDM) gratings on glass using an ion etching technique, SPIE Vol. 503, Application, Theory, and Fabrication of Periodic Structures (1984)
	C-44	D. Maystre et al., Optimization of wavelength demultiplexer in fiber optics using gold echelette gratings, SPIE Vol. 503, Application, Theory, and Fabrication of Periodic Structures (1984)
	C-45	D.R. Wisely, 32 Channel WDM Multiplexer with 1nm Channel Spacing and 0.7 nm Bandwidth, Electronics Letters, Vol. 27, No. 6, pp. 520-21 (March 14, 1991)
	C-46	C. Koeppen, et al., High Resolution Fiber Grating Optical Network Monitor, National Fiber Optic Engineers Conference, Technical Proceedings, Vol. II (September 13-17, 1998)
	C-47	M.J. Cohen, et al. InGaAs photodiode arrays for DWDM monitoring and receiving, Lightwave, pp. 99-101 (August 1999)
	C-48	J.P. Laude, Wavelength Division Multiplexing, pp. 116-117, (1993).
	C-49	Sami Hendow, et al., Performance Monitors Enable Remote Channel Management, Lightwave Special Reports, pp. 62-66 and 72 (February 2000).
	C-50	Adrian Meldrum, C- and L-band Channel Monitoring, Lightwave Special Reports, pp. 68-72 (February 2000)

RECEIVED
JUL 23 2001
Technology Center 2600

RECEIVED
DEC 04 2000
Technology Center 2600

EXAMINER	LOHA BEN	DATE CONSIDERED	8/19/04
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**

OTHER: Bloc 6 spot

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.